COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No.:	VA0092126
Effective Date:	November 13, 2012
Expiration Date:	October 31, 2017

AUTHORIZATION TO DISCHARGE UNDER THE

VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit, as set forth herein.

Owner:	Iluka Resources, Inc.
Facility Name:	Hickory Mine Concentrator
County:	Dinwiddie
Facility Location:	19540 Bolsters Road, Stony Creek, VA 23882

The owner is authorized to discharge to the following receiving stream:

Stream:	Harris Swamp, Unnamed Tributary
River Basin:	Chowan and Dismal Swamp Basin
River Subbasin:	NA
Section:	2b
Class:	VII
Special Standards:	None

Water Permit Manager, Piedmont Regional Office

September 14, 2012
Date

A. Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date the permittee is authorized to discharge from Outfall 002- Sediment basin.

Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	DAILY MINIMUM	DAILY MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MG)	NA	NA	NA	NL	1 per Year [a]	Estimate [d]
pH (standard units) [b]	NA	NA	NL	NL	1 per Year [a]	Grab
Total Suspended Solids (TSS) (mg/L) [b]	NA	NA	NA	NL	1 per Year [a]	Grab
Turbidity (NTU) [b]	NA	NA	NA	NL	1 per Year [a]	Grab
Hardness (as $CaCO_3$) (mg/L) [b]	NA	NA	NL	NA	1 per Quarter [c]	Grab
Total Recoverable Copper [b] (µg/L)	NA	NA	NA	NL	1 per Quarter [c]	Grab
Total Recoverable Cadmium (µg/L) [b]	NA	NA	NA	NL	1 per Quarter [c]	Grab
Total Recoverable Iron (mg/L) [b]	NA	NA	NA	NL	1 per Year [a]	Grab

"NA" means not applicable.
"NL" means no limitation is established. Monitoring and reporting are required.

a. Annual monitoring reports are due no later than the 10th of January following each calendar year compliance period (January 1- December 31).
b. See Part I.B.4 for benchmark monitoring concentrations.
c. 1 per quarter means once per three calendar month period (January 1- March 31, April 1- June 30, July 1- September 30, and October 1- December 31). Monitoring reports are due no later than the 10th of the month following each monitoring period.
d. Estimate of the total volume discharged during the storm event.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

3. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled, rainfall total (in inches) of the storm event that generated the sampled runoff, the duration between the storm event sampled and the end of the previous measurable storm event (a “measureable storm event” is defined as a storm event that results in an actual discharge from the site).

4. See Part I.B for additional storm water management requirements.

5. To demonstrate compliance with Part I.A.1, samples shall be taken at Outfall 002 – Discharge from the sediment basin.

B. Storm Water Management Conditions

1. General Storm Water Special Conditions

a. Sample Type.

For all storm water monitoring required in **Part I.A.1** or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such samples shall be collected from the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site). The required 72-hour storm event interval is waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at the site. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

b. Recording of Results.

For each measurement or sample taken pursuant to the storm event monitoring requirements of this permit (except snowmelt monitoring), the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

(1) The date and duration (in hours) of the storm event(s) sampled;

(2) The rainfall total (in inches) of the storm event which generated the sampled discharge;

(3) The duration between the storm event sampled and the end of the previous measurable storm event; and

(4) For snowmelt monitoring, the permittee shall identify the date of the sampling event.

In addition, the permittee shall maintain a monthly log documenting the amount of rainfall received at this facility on a daily basis. A summarization of this information shall also be submitted with the DMRs.

When a permittee is unable to collect storm water samples required in **Part I.A.1** or other applicable sections of the permit, documentation explaining the facility's inability to obtain a sample (including dates/times the outfalls were viewed and/or sampling was attempted), of no rain event, or of no "measurable" storm event shall be submitted with the DMR and also maintained with the SWPPP. Acceptable documentation includes, but is not limited to, NCDC weather station data, local weather station data, facility rainfall logs, and other appropriate supporting data.

c. Sampling Waiver.

When a permittee is unable to collect storm water samples required in **Part I.A.1** or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions or create inaccessibility for personnel (and may include such things as local flooding, high winds, hurricane, tornadoes, electrical storms) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

d. Representative Discharges.

When a facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, the permittee may monitor the effluent of one of such outfalls and report that the quantitative data also apply to the substantially identical outfall(s) provided that: (1) the representative outfall determination has been approved by DEQ prior to data submittal; and, (2) the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. The permittee shall include the following information in the SWPPP, and in any DMRs that are required to be submitted to the DEQ:

(1) The locations of the outfalls;

(2) Why the outfalls are expected to discharge substantially identical effluents, including evaluation of monitoring data, where available;

(3) Estimates of the size of the drainage area (in square feet) for each of the outfalls; and

(4) An estimate of the runoff coefficient of the drainage areas (low: under 40%; medium: 40% to 65%; high: above 65%)

e. Quarterly Visual Examination of Storm Water Quality.

(1) The permittee shall perform and document a quarterly visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) shall be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination shall be made during daylight hours (e.g., normal working hours). If no storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. The documentation shall be signed and certified in accordance with Part II.K of this permit.

(2) Visual examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging from the facility. The examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination shall be conducted in a well-lit area. No analytical tests are required to be performed on the samples. All samples (except snowmelt samples) shall be collected from the discharge resulting from a storm event that results in an actual discharge from the site (defined as a “measurable storm event”), and that occurs at least 72 hours from the previously measurable storm event. The 72-hour storm interval is waived if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term. If no qualifying storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no qualifying storm event occurred during daylight hours that resulted in storm water runoff during that quarter. The documentation shall be signed and certified in accordance with Part II.K.

(3) The visual examination reports shall be maintained on-site with the Storm Water Pollution Prevention Plan (SWPPP). The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of

storm water pollution), and probable sources of any observed storm water contamination.

(4) If the facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, the permittee may conduct visual monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall(s), provided that the storm water pollution prevention plan includes a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.

(5) When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee shall document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions or create inaccessibility for personnel (and may include such things as local flooding, high winds, hurricane, tornadoes, electrical storms) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

f. Allowable Non-Storm Water Discharges.

(1) The following non-storm water discharges are authorized by this permit:

(a) Discharges from fire fighting activities;

(b) Fire hydrant flushings;

(c) Potable water including water line flushings;

(d) Irrigation drainage;

(e) Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;

(f) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);

(g) Routine external building wash down which does not use detergents;

(h) Uncontaminated ground water or spring water;

(i) Foundation or footing drains where flows are not contaminated with process materials; and

(j) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

(k) Uncontaminated air conditioning or compressor condensate

(2) Discharges of certain sources of nonstorm water are allowable discharges under this permit provided the permittee includes the following information in the SWPPP:

(a) Identification of each allowable nonstorm water source, except for flows from fire fighting activities;

(b) The location where the nonstorm water is likely to be discharged; and

(c) Descriptions of appropriate BMPs for each source.

(3) If mist blown from cooling towers is included as one of the allowable nonstorm water discharges from the facility, the permittee shall specifically evaluate the discharge for the presence of chemicals used in the cooling tower. The evaluation shall be included in the SWPPP.

g. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities.

The discharge of hazardous substances or oil in the storm water discharge(s) from the facility shall be prevented or minimized in accordance with the storm water pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 or § 62.1-44.34:19 of the Code of Virginia. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period:

(1) The permittee is required to notify the DEQ in accordance with the requirements of Part II.G as soon as he or she has knowledge of the discharge;

(2) Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner or the MS4; and

(3) The storm water pollution prevention plan required by this permit shall be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan shall be modified where appropriate.

h. Water Quality Protection

The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards. The permittee shall employ an iterative, BMP-based program to select, install, implement and maintain best management practices (BMPs) at the facility designed to minimize pollutants in the storm water discharges, and to address any exceedance of any applicable water quality standard, effluent limitation, or TMDL waste load allocation. DEQ expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards. If there is evidence indicating that the storm water discharges authorized by this permit are causing, have the reasonable potential to cause, or are contributing to an excursion above an applicable water quality standard, an excursion above a TMDL wasteload allocation, or are causing downstream pollution (as defined in § 62.1-44.3 of the Code of Virginia), DEQ may require the permittee to take corrective action in accordance with **Part I.B.1.i (2)** and **Part I.B.1.i (3)**, and include and implement appropriate controls in the SWPPP to correct the problem.

i. Corrective actions

(1) Data exceeding benchmarks concentration values.

(a) If the benchmark monitoring result exceeds the benchmark concentration value for that parameter, the permittee must review the SWPPP and modify it as necessary to address any deficiencies that caused the exceedance. Revisions to the SWPPP must be completed within 30 days after an exceedance is discovered. When BMPs need to be modified or added (distinct from regular preventive maintenance of existing BMPs described in **Part I.B.2.c**), implementation must be completed before the next anticipated storm event if possible, but no later than 60 days after the exceedance is discovered, or as otherwise provided or approved by the DEQ Piedmont Regional Office. In cases where construction is necessary to implement BMPs, the permittee shall include a schedule in the SWPPP that provides for the completion of the BMPs as expeditiously as practicable, but no later than three years after the exceedance is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent BMP. Any BMP modifications must be documented and dated, and retained with the SWPPP, along with the amount of time taken to modify the applicable BMPs or implement additional BMPs.

(b) Natural background pollutant levels. If the concentration of a pollutant exceeds a benchmark concentration value, and the permittee determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, corrective action is not required provided that:

(i) The concentration of the benchmark monitoring result is less than or equal to the concentration of that pollutant in the natural background;

(ii) The permittee documents and maintains with the SWPPP the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. The supporting rationale shall include any data previously collected by the facility or others (including literature studies) that describe the levels of natural background pollutants in the facility's storm water discharges; and

(iii) The permittee notifies the DEQ Piedmont Regional Office on the DMR that the benchmark exceedances are attributable solely to natural background pollutant levels. Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the facility's site, or pollutants in run-on from neighboring sources which are not naturally occurring.

(2) Corrective actions. The permittee must take corrective action whenever:

(a) Routine facility inspections, comprehensive site compliance evaluations, inspections by local, state or federal officials, or any other process, observation or event result in a determination that modifications to the storm water control measures are necessary to meet the permit requirements; or

(b) There is any exceedance of an effluent limitation (including coal pile runoff), or TMDL wasteload allocation; or

(c) The DEQ Piedmont Regional Office determines, or the permittee becomes aware, that the storm water control measures are not stringent enough for the discharge to meet applicable water quality standards.

The permittee must review the SWPPP and modify it as necessary to address any deficiencies. Revisions to the SWPPP must be completed within 30 days following the discovery of the deficiency. When BMPs need to be modified or added (distinct from regular preventive maintenance of existing BMPs described in **Part I.B.2.c**), implementation must be completed before the next anticipated storm event if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the DEQ Piedmont Regional Office. In cases where construction is necessary to implement BMPs, the permittee shall include a schedule in the SWPPP that provides for the completion of the BMPs as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent BMP. The amount of time taken to modify a BMP or implement additional BMPs must be documented in the SWPPP.

Any corrective actions taken must be documented and retained with the SWPPP. Reports of corrective actions must be signed in accordance with Part II K.

(3) Follow-up monitoring and reporting. If at any time monitoring results indicate that discharges from the facility exceed an effluent limitation or a TMDL wasteload allocation, or the DEQ Piedmont Regional Office determines that discharges from the facility are causing or contributing to an exceedance of a water quality standard, immediate steps must be taken to eliminate the exceedances in accordance with the above **Part I.B.1.i.2** (Corrective actions). Within 30 calendar days of implementing the relevant corrective action(s) (or during the next qualifying runoff event, should none occur within 30 calendar days) follow-up monitoring must be undertaken to verify that the BMPs that were modified are effectively protecting water quality. Follow-up monitoring need only be conducted for pollutant(s) with prior exceedances unless there are reasons to believe that facility modifications may have reduced pollutant prevention or removal capacity for other pollutants of concern.

The follow-up monitoring data must be submitted to the DEQ Piedmont Regional Office no later than 30 days after the results are received. If the follow-up monitoring value does not exceed the effluent limitation or other relevant standard, no additional follow-up monitoring is required for this corrective action.

Should the follow-up monitoring indicate that the effluent limitation, TMDL wasteload allocation, water quality standard or other relevant standard is still being exceeded, an exceedance report must be submitted to the DEQ Piedmont Regional Office no later than 30 days after the follow-up monitoring results are received. The following information must be

included in the report: permit number; facility name, address and location; receiving water; monitoring data from this and the preceding monitoring event(s); an explanation of the situation; description of what has been done and the intended actions (should the corrective actions not yet be complete) to further reduce pollutants in the discharge; and an appropriate contact name and phone number. Additional follow-up monitoring must be continued at an appropriate frequency, but no less often than quarterly, until the discharge no longer exceeds the standard.

j. Additional Requirements for Salt Storage.

Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes shall be enclosed or covered to prevent exposure to precipitation. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles shall be located on an impervious surface. All runoff from the pile, and/or runoff that comes in contact with salt, including under drain systems, shall be collected and contained within a bermed basin lined with concrete or other impermeable materials, or within an underground storage tank(s), or within an above ground storage tank(s), or disposed of through a sanitary sewer (with the permission of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated storm water be allowed to discharge directly to the ground or to state waters.

2. Storm Water Pollution Prevention Plan

A Storm Water Pollution Prevention Plan (SWPPP) shall be developed and implemented for the facility covered by this permit. The SWPPP shall include Best Management Practices (BMPs) that are reasonable, economically practicable, and appropriate in light of current industry practices. The BMPs shall be selected, designed, installed, implemented and maintained in accordance with good engineering practices to eliminate or reduce the pollutants in all storm water discharges from the facility. The SWPPP shall also include any control measures necessary for the storm water discharges to meet applicable water quality standards.

The storm water pollution prevention plan requirements of this permit may be fulfilled, in part, by incorporating by reference other plans or documents such as a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act, or best management practices (BMP) programs otherwise required for the facility, provided that the incorporated plan meets or exceeds the plan requirements of **Part I.B.2.b** (Contents of the Plan). All plans incorporated by reference into the storm water pollution prevention plan become enforceable under this permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP of **Part I.B.2.b** the permittee shall develop the missing SWPPP elements and include them in the required plan.

a. Deadlines for Plan Preparation and Compliance.

(1) The permittee shall prepare and implement the plan as expeditiously as practicable, but not later than 270 days from the effective date of the permit.

(2) Measures That Require Construction. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

b. Contents of the Plan.

The contents of the SWPPP shall comply with the requirements listed below and those in **Part I.B.3** and **Part I.B.4.** The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team. The plan shall identify the staff individuals by name or title that comprise the facility's storm water pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing,

maintaining, revising, and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.

(2) Site Description. The plan shall include the following:

(a) Activities at the Facility. A description of the nature of the industrial activities at the facility.

(b) General Location Map. A general location map (e.g., USGS quadrangle or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility.

(c) Site Map. A site map identifying the following:

(i) The size of the property (in acres);

(ii) The location and extent of significant structures and impervious surfaces (roofs, paved areas and other impervious areas);

(iii) Locations of all storm water conveyances including ditches, pipes, swales, and inlets, and the directions of storm water flow (use arrows to show which ways storm water will flow);

(iv) Locations of all existing structural and source control BMPs;

(v) Locations of all surface water bodies, including wetlands;

(vi) Locations of potential pollutant sources identified under **Part I.B.2.b(3)**;

(vii) Locations where significant spills or leaks identified under **Part I.B.2.b(4)** have occurred;

(viii) Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; transfer areas for substances in bulk; and machinery;

(ix) Locations of storm water outfalls and an approximate outline of the area draining to each outfall, and location of municipal storm sewer systems, if the storm water from the facility discharges to them;

(x) Location and description of all non-storm water discharges;

(xi) Location of any storage piles containing salt used for deicing or other commercial or industrial purposes; and

(xii) Locations and sources of run on to the site from adjacent property, where the runon contains significant quantities of pollutants. The permittee shall include an evaluation with the SWPPP of how the quality of the storm water running onto the facility impacts the facility's storm water discharges.

(d) Receiving Waters and Wetlands. The name of all surface waters receiving discharges from the site, including intermittent streams, dry sloughs, and arroyos. Provide a description of wetland sites that may receive discharges from the facility. If the facility discharges through a municipal separate storm sewer system (MS4), identify the MS4 operator, and the receiving water to which the MS4 discharges.

(3) Summary of Potential Pollutant Sources. The plan shall identify each separate area at the facility where industrial materials or activities are exposed to storm water. Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description shall include:

(a) Activities in Area. A list of the activities (e.g., material storage, equipment fueling and

cleaning, cutting steel beams); and

(b) Pollutants. A list of the associated pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, cleaning solvents, etc.) for each activity. The pollutant list shall include all significant materials handled, treated, stored or disposed that have been exposed to storm water in the three years prior to the date this SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.

(4) Spills and Leaks. The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to storm water discharges can occur and their corresponding outfalls. The plan shall include a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance during the three-year period prior to the date this SWPPP was prepared or amended. The list shall be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills and leaks include releases of oil or hazardous substances in excess of reportable quantities, and may also include releases of oil or hazardous substances that are not in excess of reporting requirements.

(5) Sampling Data. The plan shall include a summary of existing storm water discharge sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous permit term.

(6) Storm Water Controls

(a) BMPs shall be implemented for all the areas identified in **Part I.B.2.b.(3)** (Summary of Potential Pollutant Sources) to prevent or control pollutants in storm water discharges from the facility. All reasonable steps shall be taken to control or address the quality of discharges from the site that may not originate at the facility. The SWPPP shall describe the type, location and implementation of all BMPs for each area where industrial materials or activities are exposed to storm water. Selection of BMPs shall take into consideration:

(i) That preventing storm water from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from storm water;

(ii) BMPs generally shall be used in combination with each other for most effective water quality protection;

(iii) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;

(iv) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care must be taken to avoid ground water contamination);

(v) Flow attenuation by use of open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;

(vi) Conservation or restoration of riparian buffers will help protect streams from storm water runoff and improve water quality; and

(vii) Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

(b) Control Measures. The permittee shall implement the following types of BMPs to prevent and control pollutants in the storm water discharges from the facility, unless it can be demonstrated and documented that such controls are not relevant to the discharges (e.g., there are no storage piles containing salt).

(i) Good Housekeeping. The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to storm water discharges. Typical problem areas include areas around trash containers, storage areas, loading docks, and vehicle fueling and maintenance areas. The plan shall include a schedule for

regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers. The introduction of raw, final or waste materials to exposed areas of the facility shall be minimized to the maximum extent practicable. The generation of dust, along with off-site vehicle tracking of raw, final or waste materials, or sediments, shall be minimized to the maximum extent practicable.

(ii) Eliminating and Minimizing Exposure. To the extent practicable, industrial materials and activities shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt, and runoff. Note: Eliminating exposure at all industrial areas may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9 VAC 25-31-120 E, thereby eliminating the need to have storm water discharges permitted.

(iii) Preventive Maintenance. The permittee shall have a preventive maintenance program that includes regular inspection, testing, maintenance and repairing of all industrial equipment and systems to avoid breakdowns or failures that could result in leaks, spill and other releases. This program is in addition to the specific BMP maintenance required under **Part I.B.2.c** (Maintenance of BMPs).

(iv) Spill Prevention and Response Procedures. The plan shall describe the procedures that will be followed for preventing and responding to spills and leaks.

(A) Preventive measures include barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.

(B) Response procedures shall include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the Pollution Prevention Team.

(C) Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP, and in other locations where it will be readily available.

(v) Routine Facility Inspections. Facility personnel who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at the facility, and who can also evaluate the effectiveness of BMPs shall regularly inspect all areas of the facility where industrial materials or activities are exposed to storm water. These inspections are in addition to, or as part of, the comprehensive site evaluation required under **Part I.B.2.d**. At least one member of the Pollution Prevention Team shall participate in the routine facility inspections.

The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the DEQ Piedmont Regional Office for less frequent intervals. At least once each calendar year, the routine facility inspection must be conducted during a period when a storm water discharge is occurring.

Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but not later than within 30 days of the inspection, unless permission for a later date is granted in writing by the DEQ Piedmont Regional Office. The results of the inspections shall be documented in the SWPPP, along with the date(s) and description(s) of any corrective actions that were taken in response to any deficiencies or opportunities for improvement that were identified.

(vi) Employee Training. The permittee shall implement a storm water employee

training program for the facility. The SWPPP shall include a schedule for all types of necessary training, and shall document all training sessions and the employees who received the training. Training shall be provided for all employees who work in areas where industrial materials or activities are exposed to storm water, and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel, etc.). The training shall cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, BMP operation and maintenance, etc. The SWPPP shall include a summary of any training performed.

(vii) Sediment and Erosion Control. The plan shall identify areas at the facility that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, and/or stabilization BMPs to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.

(viii) Management of Runoff. The plan shall describe the storm water runoff management practices (i.e., permanent structural BMPs) for the facility. These types of BMPs are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in storm water discharges from the site. Structural BMPs may require a separate permit under § 404 of the CWA and the Virginia Water Protection Permit Program Regulation (9 VAC 25-210) before installation begins.

c. Maintenance of BMPs.

All BMPs identified in the SWPPP shall be maintained in effective operating condition. Storm water BMPs identified in the SWPPP shall be observed during active operation (i.e., during a storm water runoff event) to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.

The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all BMPs, and shall include a description of the back-up practices that are in place should a runoff event occur while a BMP is off-line. The effectiveness of nonstructural BMPs shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

If site inspections required by **Part I.B.2.b(6)(b)(v)** (Routine Facility Inspections) or **Part I.B.2.d** (Comprehensive Site Compliance Evaluation) identify BMPs that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of maintenance and repairs of BMPs, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, and for repairs, date(s) that the BMP(s) returned to full function, and the justification for any extended maintenance or repair schedules.

d. Comprehensive Site Compliance Evaluation.

The permittee shall conduct comprehensive site compliance evaluations at least once a year. The evaluations shall be done by qualified personnel who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at the facility, and who can also evaluate the effectiveness of BMPs. The personnel conducting the evaluations may be either facility employees or outside constituents hired by the facility.

(1) Scope of the Compliance Evaluation. Evaluations shall include all areas where industrial materials or activities are exposed to storm water, as identified in **Part I.B.2.b(3)**. The personnel shall evaluate:

(a) Industrial materials, residue or trash that may have or could come into contact with

storm water;

(b) Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;

(c) Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;

(d) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;

(e) Evidence of, or the potential for, pollutants entering the drainage system;

(f) Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring;

(g) Review of training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of BMPs;

(h) Results of both visual and any analytical monitoring done during the past year shall be taken into consideration during the evaluation.

(2) Based on the results of the evaluation, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by **Part I.B.2.b(2)(c)**; revise the description of controls required by **Part I.B.2.b(6)** to include additional or modified BMPs designed to correct problems identified). Revisions to the SWPPP shall be completed within 30 days following the evaluation, unless permission for a later date is granted in writing by the DEQ Piedmont Regional Office. If existing BMPs need to be modified or if additional BMPs are necessary, implementation shall be completed before the next anticipated storm event, if practicable, but not more than 60 days after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the DEQ Piedmont Regional Office;

(3) Compliance Evaluation Report. A report shall be written summarizing the scope of the evaluation, name(s) of personnel making the evaluation, the date of the evaluation, and all observations relating to the implementation of the SWPPP, including elements stipulated in **Part I.B.2.d(1) (a) through (h)** above. Observations shall include such things as: the location(s) of discharges of pollutants from the site; location(s) of previously unidentified sources of pollutants; location(s) of BMPs that need to be maintained or repaired; location(s) of failed BMPs that need replacement; and location(s) where additional BMPs are needed. The report shall identify any incidents of noncompliance that were observed. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part II.K and maintained with the SWPPP.

(4) Where compliance evaluation schedules overlap with routine inspections required under **Part I.B.2.b.(6)(b)(v)** the annual compliance evaluation may be used as one of the routine inspections.

e. Signature and Plan Review.

(1) Signature/Location. The SWPPP shall be signed in accordance with Part II K, dated, and retained on-site at the facility covered by this permit in accordance with Part II.B.2. All other changes to the SWPPP, and other permit compliance documentation, must be signed and dated by the person preparing the change or documentation.

(2) Availability. The permittee shall make the SWPPP, annual site compliance evaluation report, and other information available to DEQ upon request.

(3) Required Modifications. DEQ may notify the permittee at any time that the SWPPP, BMPs, or other components of the facility's storm water program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met, and may include required modifications to the storm water program, additional monitoring requirements, and special reporting requirements. The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification,

unless permission for a later date is granted in writing by DEQ, and shall submit a written certification to the Director that the requested changes have been made.

f. Maintaining an Updated SWPPP.

(1) The permittee shall review and amend the SWPPP as appropriate whenever:

(a) There is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility;

(b) Routine inspections or compliance evaluations determine that there are deficiencies in the BMPs;

(c) Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;

(d) There is a spill, leak or other release at the facility; or

(e) There is an unauthorized discharge from the facility.

(2) SWPPP modifications shall be made within 30 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified BMPs (distinct from regular preventive maintenance of existing BMPs described in **Part I.B.2.c**) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the DEQ Piedmont Regional Office. The amount of time taken to modify a BMP or implement additional BMPs shall be documented in the SWPPP.

(3) If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part II.G of this permit.

3. Sector Specific Storm Water Pollution Prevention Plan Requirements (Sector G- Metal Mining)

In addition to the requirements of **Part I.B.2**, the plan shall include, at a minimum, the following SWPPP requirements for active, inactive, and temporarily inactive metal mining facilities, and sites undergoing reclamation.

a. Site description.

(1) Activities at the facility. A description of the mining and associated activities taking place at the site that can potentially affect storm water discharges covered by this permit. The description shall include a general description of the location of the site relative to major transportation routes and communities.

(2) Site map. The site map shall identify the locations of the following, as appropriate: mining/milling site boundaries; access and haul roads; an outline of the drainage areas of each storm water outfall within the facility, and an indication of the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an individual VPDES permit; equipment storage, fueling and maintenance areas; materials handling areas; outdoor manufacturing, storage or material disposal areas; storage areas for chemicals and explosives; areas used for storage of overburden, materials, soils or wastes; location of mine drainage (where water leaves mine) or any other process water; tailings piles/ponds, both proposed and existing; heap leach pads; points of discharge from the property for mine drainage/process water; surface waters; boundary of tributary areas that are subject to effluent limitations guidelines; and location(s) of reclaimed areas.

b. Summary of potential pollutant sources.

For each area of the mine/mill site where storm water discharges associated with industrial activities occur, the plan shall identify the types of pollutants likely to be present in significant amounts (e.g., heavy metals, sediment). The following factors shall be considered: the

mineralogy of the ore and waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced or discharged; the likelihood, if any, of contact with storm water; vegetation of site; history of significant leaks/spills of toxic or hazardous pollutants. A summary of any existing ore or waste rock/overburden characterization data and test results for potential generation of acid rock shall also be included. If the ore or waste rock/overburden characterization data are updated due to a change in the ore type being mined, the SWPPP shall be updated with the new data.

c. Storm water controls.

(1) Routine facility inspections. Sites shall be inspected at least monthly unless adverse weather conditions make the site inaccessible.

(2) Employee training. Employee training shall be conducted at least annually at active mining and temporarily inactive sites. All employee training shall be documented in the SWPPP.

(3) Structural BMPs. Each of the following BMPs shall be considered in the SWPPP. The potential pollutants identified in subpart F 1 b above shall determine the priority and appropriateness of the BMPs selected. If BMPs are implemented or planned but are not listed here (e.g., substituting a less toxic chemical for a more toxic one), descriptions of them shall be included in the SWPPP.

(a) Sediment and erosion control. The measures to consider include: diversion of flow away from areas susceptible to erosion (measures such as interceptor dikes and swales, diversion dikes, curbs and berms); stabilization methods to prevent or minimize erosion (such as temporary or permanent seeding; vegetative buffer strips; protection of trees; topsoiling; soil conditioning; contouring; mulching; geotextiles (matting, netting, or blankets); riprap; gabions; and retaining walls); and structural methods for controlling sediment (such as check dams; rock outlet protection; level spreaders; gradient terraces; straw bale barriers; silt fences; gravel or stone filter berms; brush barriers; sediment traps; grass swales; pipe slope drains; earth dikes; other controls such as entrance stabilization, waterway crossings or wind breaks; or other equivalent measures).

(b) Storm water diversion. A description of how and where storm water will be diverted away from potential pollutant sources to prevent storm water contamination. BMP options may include the following: interceptor dikes and swales; diversion dikes, curbs and berms; pipe slope drains; subsurface drains; drainage/storm water conveyance systems (channels or gutters, open top box culverts and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts) or equivalent measures.

(c) Management of runoff. The potential pollutant sources given in subdivision 1 b of this subsection shall be considered when determining reasonable and appropriate measures for managing runoff.

(d) Capping. When capping of a contaminant source is necessary, the source being capped and materials and procedures used to cap the contaminant source shall be identified.

(e) Treatment. If treatment of a storm water discharge is necessary to protect water quality, include a description of the type and location of storm water treatment that will be used. Storm water treatments include the following: chemical or physical systems; oil/water separators; artificial wetlands; etc. The permittee is encouraged to use both passive and/or active treatment of storm water runoff. Treated runoff may be discharged as a storm water source regulated under this permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440 (2007)).

(f) Certification of discharge testing. The permittee shall test or evaluate all outfalls covered under this permit for the presence of specific mining-related nonstorm water discharges such as seeps or adit discharges or discharges subject to effluent limitations

guidelines (e.g., 40 CFR Part 440 (2007)), such as mine drainage or process water. Alternatively (if applicable), the permittee may certify in the SWPPP that a particular discharge composed of commingled storm water and nonstorm water is covered under a separate VPDES permit; and that permit subjects the nonstorm water portion to effluent limitations prior to any commingling. This certification shall identify the nonstorm water discharges, the applicable VPDES permit(s), the effluent limitations placed on the nonstorm water discharge by the permit(s), and the points at which the limitations are applied.

4. Sector Specific Benchmark Monitoring:

Mineral mining facilities are required to monitor their storm water discharges for the pollutants of concern listed in Table 1. Benchmark concentration values, as included in Table 1 of this permit, are not effluent limitations. Exceedance of a benchmark concentration does not constitute a violation of this permit and does not indicate that violation of a water quality standard has occurred; however, it does signal that modifications to the SWPPP are necessary, unless justification is provided in the comprehensive site compliance evaluation **(Part I.B.2.d)**. In addition, exceedance of benchmark concentrations may indicate the requirement for more specific pollution prevention controls.

Table 1. Benchmark Monitoring Requirements	
Pollutants of Concern	**Benchmark Concentration**
pH	6.0 – 9.0 SU
Total Suspended Solids (TSS)	100 mg/L
Turbidity	50 NTU
Hardness (as $CaCO_3$)	No benchmark value
Copper (Cu)	18 µg/L
Cadmium (Cd)	2.1 µg/L
Iron (Fe)	1.0 mg/L

C. Special Conditions

1. Operation and Maintenance (O&M) Manual Requirement

The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.

The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent, storm water and sludge samples;

b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;

c. Discussion of Best Management Practices, if applicable;

d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.C.2 that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;

e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;

f. Plan for the management and/or disposal of waste solids and residues;

g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;

h. List of facility, local and state emergency contacts; and,

i. Procedures for reporting and responding to any spills/overflows/treatment works upsets.

2. Materials Handling and Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

3. Water Quality Criteria Reopener

Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.

4. Compliance Reporting

a. The Quantification Level (QL) is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used. The permittee shall use any method in accordance with Part II A of this permit

b. Reporting:

Daily Maximum – Reporting of the daily maximum monitoring requirements for the parameters listed in Part I.A and Part I.B of this permit shall be determined as follows: All concentration data below the QL used for the analysis shall be treated as equal to the QL. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis then the maximum value of the resulting daily average value shall be reported on the DMR as being less than (“<”) that calculated value.

c. **Single Datum –** Any single datum required shall be reported as less than ("<") the numerical quantification value. Otherwise the numerical value shall be reported.

d. **Significant Digits** – Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

5. Groundwater Monitoring Plan

The permittee shall continue sampling and reporting in accordance with the ground water monitoring plan approved on April 6, 2007 and the addendum to the groundwater monitoring plan (Request to Relocate Well HMW-A) submitted on July 20, 2011 and approved on October 18, 2011. The purpose of this plan is to determine if the system integrity is being maintained, ensure the contamination plume is contained within the property boundary, and to indicate if activities at the site are resulting in violations of the Board's Ground Water Standards. The approved plan is an enforceable part of the permit. Any changes to the plan must be submitted for approval to the Piedmont Regional Office.

If monitoring results indicate that additional contamination of the ground water has occurred, the permittee shall submit a corrective action plan within 60 days of being notified by the regional office. The plan shall set forth the steps to be taken by the permittee to ensure that the contamination source is eliminated or that the contaminant plume is contained on the permittee's property. In addition, based on the extent of contamination, a risk analysis may be required. Once approved, this plan and/or analysis shall be incorporated into the permit by reference and become an enforceable part of this permit.

Complete land reclamation and facility closure in accordance with the closure plan (conditionally approved 12/19/08) does not relinquish the permittee from the groundwater monitoring requirements of this permit. Ground water monitoring in accordance with this special condition (Part I.C.5) shall continue until such time as DEQ approval to cease monitoring is granted.

6. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

7. **Facility Closure Plan**

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ Piedmont Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ Piedmont Regional Office prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 calendar days following closure completion, the permittee shall submit to the DEQ Piedmont Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.

8. Concept Engineering Report (CER)

Prior to constructing any wastewater treatment works, the permittee shall submit a Concept Engineering Report (CER) to the DEQ Piedmont Regional Office. DEQ written approval shall be secured prior to constructing any wastewater treatment works. The permittee shall construct the wastewater treatment works in accordance with the approved CER. No later than 14 days following completion of construction of any project for which a CER has been approved, written notification shall be submitted to the DEQ Piedmont Regional Office certifying that, based on an inspection of the project, construction was completed in accordance with the approved CER. The written notification shall be certified by a professional engineer licensed in the Commonwealth of Virginia or signed in accordance with Part II.K of this permit. The installed wastewater treatment works shall be operated to achieve design treatment and effluent concentrations. Approval by the Department of Environmental Quality does not relieve the owner of the responsibility for the correction of design and/or operational deficiencies. Noncompliance with the CER shall be deemed a violation of this permit.